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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HALPERN, MARK

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/827,531

Applicant(s)

GANE ET AL.

Examiner

Mark Halpern

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2005 and 10 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-81 is/are pending in the application.
- 4a) Of the above claim(s) 40,41,52-54,66-70,72-74 and 80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38,39,42,44-49,51,55,58,60,61,71,75-77,79 and 81 is/are rejected.
- 7) ☒ Claim(s) 43,50,56,59,62-65,67 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/646897.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1) Applicant's election with traverse of invention I, species of an aqueous solution of a paper coating color, drawn on claims 38-39, 42-51, 55-71, 75-81, in the replies filed on 2/1/2005 and 12/10/2004, is acknowledged. The traversal is on the ground(s) that inventions I and II are not properly restricted, and it is not clear how the inventions I and III and inventions II and III are unrelated. This is not found persuasive. The process can be used to make other and materially different product, for example, a dry lining. A compound and a method of making a compound have different functions, different effects and different modes of operation than a sheet of paper.

The requirement is still deemed proper and is therefore made FINAL.

Claims 40-41, 52-54, 72-74, are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claims 66-70, 80, are withdrawn by the examiner as not reading on the elected species.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 38-39, 42, 44-49, 55, 58, 71, 75-76, 81, are rejected under 35

U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Naydowski (5,605,568).

Claims 38-39, 44-47, 55, 71, 81: Naydowski discloses a coating pigment slurry composite that includes the following ingredients: calcium carbonate, talc, and a binder. Calcium carbonate represents component that has a hydrophilic site. Talc represents component that has an organophilic site. The binder is a polymer or copolymer of acrylic, methacrylic, itaconic, crotonic or fumaric acids (col. 5, lines 1-20, col. 7, lines 30-31). The slurry includes water (col. 3, line 37). The composite components are bound by the binder. Naydowski uses a novel type of binder (col. 2, lines 10-12). Naydowski is silent on the components being co-structured or co-adsorbed. However, it is inherent or in the least it would have been obvious, to one skilled in the art at the time the invention was made, that the composite components are co-structured or co-adsorbed because the components are bound by the binder, and the binder function is

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to bind the compounds of the composite. The present specification defines as forming a structure comparable to a bond or an adhesion between the components.

Claim 42: fumaric acid is an organic compound.

Claims 48-49, 75-76: the percentage of calcium carbonate is 24 to 64 % by weight; the percentage of talc is 5 to 48 % by weight; the percentage of binder is 1.4 % (col. 3, lines 35-46).

Claim 58: the composition is used for coating paper color especially for gravure printing (Abstract, and col. 7, lines 15-17).

3) Claims 51, 60, 77, 79, are rejected under 35 U.S.C. 103(a) as being unpatentable over Naydowski in view of Andersen (5,662,731).

Claims 51, 60: Naydowski is applied as above for claim 38, 58, Naydowski is silent on the composite compound yield stress. Andersen discloses a composite of calcium carbonate, talc and a binder of a yield strength of 10 Pa (col. 24, lines 60-65). The yield strength of composite of Andersen exceeds the yield stress of present composite as recited in present Table 3. It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Andersen and Naydowski, because such a combination would provide a greater range of composite applications in the products of the design of Naydowski.

Claims 77, 79: the yield strength of Anderson is in some instances four times the yield stress of present invention as represented by present Table 3.

4) Claims 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naydowski in view of Arrington-Webb (5,584,924). Naydowski is applied as above for

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claim 58, Naydowski fails to disclose the paper coating light scattering coefficient.

Arrington-Webb discloses an compound of calcium carbonate and clay of improved opacity having a light scattering coefficient of from about 0.5 to about 1.6 (x 1,000 sq. ft. per pound)(col. 4, lines 10-17), which calculates to from about 102 to about 327 m²/kg.

Said scattering coefficient is of range that is greater than the scattering coefficient of the present invention as disclosed in Table 6 of the invention. It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Naydowski and Arrington-Webb, because such a combination would extent the application of products of the design of Naydowski.

Allowable Subject Matter

5) Claims 43, 50, 56, 59, 62-65, 67, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for indicating allowable subject matter is that the cited prior art does not show: a composite compound of mineral or organic fillers or pigments that has a binding agent supported by gas (claim 43); a composite compound of mineral or organic fillers or pigments that is macroscopically homogeneous (claims 50, 56, 59, 67); a composite compound of mineral or organic fillers or pigments used as a paper coating color of whiteness claimed (claim 62), or of higher brightness claimed (claim 63), of a

curve representative of the tack force claimed (claim 64) or of print density claimed (claim 65).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).


6) Claims 38-81, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-59, of U.S. Patent No. 6,666,953. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present invention discloses a composite compound of mineral or organic fillers or pigments blended with binding agent as does the patent.

Conclusion

7) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mark Halpern
Primary Examiner
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